

Work Order ID 160791

Thursday, May 04, 2017 10:06:30 AM

160791

Page 1

Item ID: D212-1024-013 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bell Medium Main Rotor Tie Down - Fixed Provisions
Start Date: 5/5/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 5/17/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: PA **DAS 21 9-89** Date: 2017/05/04 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D212-1024	REV A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.02							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels as per PPP D212-1024-013		CHG001						
							DAS 28 9-89	JUN 14 2017	
110	Pick Kit	0.00							
110	Packaging								
Packaging	Memo	0.02							
Packaging									
							CWB	JUN 06 2017	DAS 6 9-89
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									
							DAS 28 9-89	JUN 07 2017	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

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Page 2

Item ID: D212-1024-013 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
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Start Date: 5/5/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 5/17/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Packaging	0.00							
270									
Packaging	Memo	0.03							
Packaging	Identify and pack for shipping as per PPP D212-1024-013								
	Location : <i>Fg 124</i>								
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.10							
Quality Control									

DAS 28 9-89 JUN 14 2017

DAS 21 9-89 JUN 15 2017

DAS 21 9-89 JUN 15 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Thursday, May 04, 2017 10:06:29 AM

160791

D212-1024-013

Required Date: 5/17/2017

Required Qty: 1.00

[illegible]

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST163	17	
147963	14	
150368	3	

[illegible]

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST287	32	
m135352	32	

MS24693-275B	Purchased	No	110	Each	22.0000	3	3	JUN 06 2017
MS24693-275R						**	CWB	
SCREW								

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST287	22	
<u>m135603</u>	22	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



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Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter		FAULT CATEGORY		☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes		☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
		☐ OTHER : _____									

5. PARTS LIST

Qty -011	Qty -013	Part Number	Description
X		D212-1024-011	Main Rotor Tie Down
	X	D212-1024-013	Fixed Provisions
1	1	D5312-1	Tie Down Bracket
1		D5344-041	Tie Down Assembly
1		*D5339-1	*Carabiner Clip
1		*D5340-1	*Tennis Ball
1		*D5341-1	*Nylon Rope
1		*D5342-1	*Rope Clamp
1		*D5343-1	*Long Hook
3	3	MS24693-274B	Screw
3	3	MS24693-275B	Screw

*Included in D5344-041

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Item ID: D212-1024-013

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bell Medium Main Rotor Tie Down - Fixed Provisions

Start Date: 5/5/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 5/17/2017 Req'd Qty: 1.00

1

Customer:

Reference: (P.A.)SCHEDULED/S

Approvals:

Process Plan: PA

DAC

Date: 2017/05/04

Tooling:

Date:

Run Start *NR1*

QC:

21

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

IIN-D212-1024

REV A

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.02

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels as per PPP D212-1024-013 CHG001

110

Pick Kit

0.00

110

Packaging

Packaging

Memo

0.02

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH16-24

Issue No.: 1

Approval Date: May 31, 2016

Issue Date: May 31, 2016

Responsible Office:

Prairie and Northern

Aircraft/Engine Type or Model:

Bell 205A, 205A-1, 205B, 212

Canadian Type Certificate or Equivalent:

H-104 (Bell 205B)

H-86 (Bell 212)

H1SW (Bell 205A, 205A-1)

Description of Type Design Change:

Main Rotor Tie Down

**Installation/Operating Data,
Required Equipment and Limitations:**

Installation of the Main Rotor Tie Down must be in accordance with Transport Canada Civil Aviation (TCCA) approved Dart Aerospace Limited (Ltd) Installation Instructions, IIN-D212-1024 Revision A, dated October 13th 2015 or later TCCA approved revision.

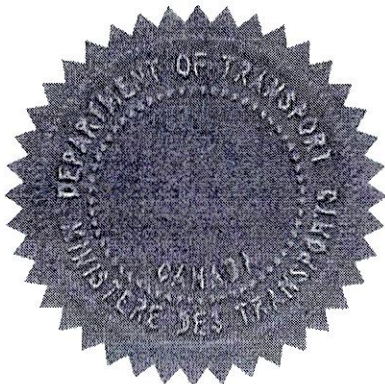
Maintenance of the Main Rotor Tie Down must be in accordance with TCCA accepted Instructions for Continued Airworthiness, ICA-D212-1024 Revision 0, dated October 23rd 2015 or later TCCA accepted revision.

Definition of the Type Design Change: TCCA approved Master Document List, MDL-D212-1024 Revision A, dated May 18th 2016 or later TCCA approved revision.

Basis of Certification for Affected Areas: 14 CFR Part 29 dated February 1st, 1965 including amendments 29-1 and 29-2.

— End —

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.



Loy Y. Liew
For Minister of Transport